Appl. No. 10/532,493

Amdt. dated July 16, 2007

Reply to Office action of April 16, 2007

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the

application:

Listing of Claims:

Claims 1-14. (Canceled)

15. (Currently amended) A fuel injection system for internal combustion engines,

comprising

a fuel injection nozzle (2), which can be supplied with fuel by a high-pressure fuel

source (1), the fuel injection nozzle (2) having a movable nozzle piston (3) for opening and

closing injection openings (6), an injection nozzle high-pressure chamber (21), and an

injection nozzle control chamber (20),

a pressure boosting device (7) is connected between the fuel injection nozzle (2) and

the high-pressure fuel source (1), the pressure boosting device (7) having a movable pressure

booster piston (8), a pressure booster work chamber (11), and a pressure booster high-

pressure chamber (9), and

a filling connection (10) which is open for filling the pressure booster high-pressure

chamber (9) when the fuel injection nozzle (2) is closed and is itself closed when the fuel

injection nozzle (2) is open,

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wherein closure of the filling connection (10) is coupled with the motion of the nozzle piston (3) in the opening direction to uncover the injection openings, and

wherein the filling connection (10) is located between the pressure booster highpressure chamber (9) and the injection nozzle control chamber (20).

- 16. (Previously presented) The fuel injection system of claim 15, wherein the filling connection (10) is closed by the nozzle piston (3) when the fuel injection nozzle (2) is open.
- 17. (Previously presented) The fuel injection system of claim 15, wherein a pressure change in a pressure booster control chamber (12) contained in the pressure boosting device (7) and/or in the pressure booster work chamber (11) causes a pressure change in the pressure booster high-pressure chamber (9).
- 18. (Previously presented) The fuel injection system of claim 15, further comprising a control valve (14) operable to control the opening and closing of the injection openings (6) are controllable via a control valve (14).
- 19. (Canceled)

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20. (Previously presented) The fuel injection system of claim 15, wherein the filling

connection (10) has a throttle (23).

21. (Previously presented) The fuel injection system of claim 15, wherein the high-pressure

fuel source (1) communicates during the injection, via a high-pressure line (27), with the

pressure booster work chamber (11) contained in the pressure boosting device (7).

22. (Previously presented) The fuel injection system of claim 15, wherein the filling

connection (10) is closable by the cooperation of the nozzle piston (3) with a sealing seat

(26).

23. (Previously presented) The fuel injection system of claim 15, further comprising a

sealing seat (26) embodied on the nozzle piston (3) and cooperating with a pressure piece

(45) for closing the filling connection (10).

24. (Previously presented) The fuel injection system of claim 15, wherein the filling

connection (10) is embodied in the nozzle piston (3).

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25. (Previously presented) The fuel injection system of claim 15, wherein the injection

nozzle control chamber (20) is located in the pressure booster piston (8), and wherein the

pressure booster piston (8) is embodied as a hollow piston.

26. (Previously presented) The fuel injection system of claim 17, wherein the pressure

booster high-pressure chamber (9) communicates, when the fuel injection nozzle (2) is

closed, with the high-pressure fuel source (1) via a control valve (14) (in a first switching

position (15)), the pressure booster control chamber (12), the injection nozzle control

chamber (20), and the filling connection (10).

27. (Previously presented) The fuel injection system of claim 17, wherein when the fuel

injection nozzle (2) is opening and is open, the pressure booster control chamber (12) and the

injection nozzle control chamber (20) communicate with a low-pressure line (17).

28. (Previously presented) The fuel injection system of claim 17, wherein when the fuel

injection nozzle (2) is closed, the pressure booster high-pressure chamber (9), via the filling

connection (10), and via the injection nozzle control chamber (20), the pressure booster

control chamber (12) and the pressure booster work chamber (11) communicate with at least

one low-pressure line (17, 48, 49).

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